



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/534,750

05/12/2005

Masakazu Fujiki

00862.023324.

1633

5514

7590

06/20/2008

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

PARK, JEONG S

ART UNIT

PAPER NUMBER

2154

MAIL DATE

DELIVERY MODE

06/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/534,750	Applicant(s) FUJIKI ET AL.	
	Examiner JEONG S. PARK	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/22/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,8, 9,11,18 and 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8, 9,11,18 and 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/11/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/22/2008 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 8, 9, 11, 18 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Negishi et al. (hereinafter Negishi)(U.S Patent No. 6,571,278 B1) in view of Birkler et al. (hereinafter Birkler)(U.S. Publication No. 2002/0129103 A1).

Regarding claims 1, 18 and 36, Negishi teaches as follows:

an information processing method for maintaining, in a system in which each of a plurality of client processes (computer A and computer B, 1 and 3 in figure 1 respectively) connected via an information transmission medium (communication medium, 19 in figure 1) holds and uses shared data (replica contents) to be shared by the plurality of client processes, consistency of shared data held by the respective

Art Unit: 2154

plurality of client processes (computer for maintaining consistency of replica contents by interchanging data modification with another computer, see, e.g., col. 2, lines 25-27), comprising:

in input step of inputting a manipulation request (application, 5 in figure 1, issues a request to the replica controller, 7 in figure 1, for the data modification, see, e.g., col. 4, lines 40-44);

a determining step of determining a mode, based on designation information used to designate a mode to be adopted to each of a plurality of items included in the shared data, (the order of the replica in the replica updating is designated, see, e.g., col. 4, lines 40-50), and manipulation contents of the input manipulation request, from a plurality of modes including a first mode, a second mode, and a third mode (the timing of replica updating in accordance with the received modification request is determined by designated timing options such as ordinary, backward flush and two way flush designation, see, e.g., col. 2, lines 36-64);

a processing step of executing a process corresponding to the manipulation request in accordance with the mode determined in the determining step (the replica controller 7 in figure 1, updates the replica accordance with a designated timing, see, e.g., col. 5, lines 6-13),

wherein the determining step determines that the mode corresponding to the manipulation request is the first mode or the second mode (the timing of replica updating in accordance with the received modification request is determined by designated timing options such as ordinary, backward flush and two way flush

Art Unit: 2154

designation, see, e.g., col. 2, lines 36-64), when the manipulation contents of the manipulation request is based on a user's interactive manipulation (the user interface is inherently included in any computer system since the application in computer A, 5 in figure 1, generates the modification request with the selection of update mode, see, e.g., col. 4, lines 26-39 and figure 1),

wherein the processing step includes;

a sending step of sending, when the manipulation request requests a manipulation of the shared data, request information that represents the manipulation request to a server process (packet transmitter, 13 in figure 1, generates a necessary packet and transmits it to the computer B via a communication medium, 19 in figure 1, see, e.g., col. 6, lines 4-6 and step 1200 in figure 2 and the computer B stores the received packet in the reception queue, see, e.g., col. 6, lines 24-34);

a reception step of receiving response information corresponding to the request information sent in the sending step, from the server process (computer B receives response BT and SBT from computer A which were sent to computer A previously and then generating response confirmation BT and SBT and comparing it with the sent packet, see, e.g., col. 6, lines 24-34, therefore each computer can acknowledge the receiving confirmation by transmitting and comparing BT and SBT values);

a manipulation execution step of executing a manipulation for the shared data in accordance with the manipulation request or the response information received in the reception step (a timing of update execution for the replica in accordance with the received modification request, see, e.g., col. 2, lines 25-42);

wherein, in a case where the determining step determines that the mode corresponding to the manipulation request input in the input step is the first mode, the manipulation execution step manipulates the shared data in response to the manipulation request (the replica is updated in accordance with the modification request from the application) and the sending step sends the request information indicating the manipulation request to the server process (a transmitter for transmitting to another computer a modification request for data in the replica and the controller may make the third and fourth numbers (the values of response BT and SBT) to be included in the modification request, see, e.g., col. 3, lines 16-23);

wherein, in a case where the determining step determines that the mode corresponding to the manipulation request input in the input step is the second mode, the sending step sends the request information indicating the manipulation request to the server process in response to the manipulation request (the replica is updated in accordance with the modification request from the application and a transmitter for transmitting to another computer a modification request for data in the replica and the controller may make the third and fourth numbers (the values of response BT and SBT) to be included in the modification request, see, e.g., col. 3, lines 16-23);

the manipulation execution step manipulates the shared data based on the manipulation request indicated by the reception information (received response values of the previously transmitted packet) in response to reception of the reception information (transmit a packet which includes the values of response BT and SBT in the reception queue and the values of the response BT and SBT are used to change the

Art Unit: 2154

values of the response confirmation BT and SBT that are stored in the transmission queue of the computer B, see, e.g., col. 6, lines 24-34, therefore the values of the response confirmation is updated by using the value of the response, see, e.g., col. 6, lines 34-49);

replica controller (7 in figure 1) executes a modification request generated from application (5 in figure 1) and stores the replica in the data storage device (17 in figure 1)(see, e.g., col. 4, lines 40-44 and col. 7, lines 16-30);

when the modification request is executed, the replica controller (7 in figure 1) sends BT and SBT value included in packet 1 to the other process (computer B) for response back for the packet executed the modification request in computer A (see, e.g., col. 7, lines 20-41); and

using response confirmation values of BT and SBT for a transmission confirmation of the sent packet in order to discard the sent packet from the transmission queue (see, e.g., col. 7, lines 43-52).

Therefore, Negishi teaches all the limitations of updating or manipulating a shared data between multiple computers except for using timeout method in order to execute a manipulation based on response message timing from the server.

Birkler teaches as follows:

a request/response protocol implementation between a client and a server for updating presence information (see, e.g., page 2, paragraph [0020], lines 1-4 and figure 4); and

implementing timeout method in order to response back to the requested party

Art Unit: 2154

(once expiration of the timeout period is detected, an update response is sent back to the client from the server, see, e.g., page 2, paragraph [0023], lines 13-17 and figure 10).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Negishi to include a request/response protocol implementation between a client and a server and a timeout method as taught by Birkler in order to provide two ways communications by acknowledgement or response message from the server before modifying or updating the shared data of the client and two ways communications in case of loss of response message due to the transmission error by implementing the well-known timeout concept in the art (the well-known timeout concept comprises waiting certain period of time for the response message and retransmitting the previously sent data or transmitting the next data when a response message is not received).

Regarding claim 8, Negishi teaches as follows:

a step of providing a user interface that allows a user to select an object display corresponding to a desired item and to designate a desired update mode (the user interface is inherently included in any computer system since the application in computer A, 5 in figure 1, generates the modification request with the selection of update mode, see, e.g., col. 4, lines 26-39 and figure 1).

Regarding claim 9, Negishi teaches as follows:

a mode selected through the user interface is reflected on the shared data (data storage device) of the plurality of client processes (multiple computers)(the data storage

device, 17 in figure 1, stores a replica generated by replica controller, 7 in figure 1, based on the modification request including update mode and functions as an ordinary database, see, e.g., col. 5, lines 25-29).

Regarding claim 11, Negishi in view of Birkler teach all the limitations of claim as presented above per claim 1 because Birkler teaches the implementation of timeout method, the step of setting the time limit of manipulation execution is inherently included.

Response to Arguments

4. Applicant's arguments filed 4/22/2008 have been fully considered but they are not persuasive.

A. Summary of Applicant's Arguments

In the remarks, the applicant argues as followings:

1) Negishi does not teach or suggest, among other features, providing first, second and third modes for controlling a manipulation request, as well as having the capability of controlling the execution timing of the manipulation request. In the second mode of Applicants' invention, for example, the manipulation execution step manipulates the shared data based on the manipulation request indicated by a reception information when the reception information is received from the server process within a time limit of manipulation execution.

B. Response to Arguments

In response to argument 1) Negishi teaches as follows:

providing first, second and third modes for controlling a manipulation request (the

timing of replica updating in accordance with the received modification request is determined by designated timing options such as ordinary, backward flush and two way flush designation, see, e.g., col. 2, lines 36-64); and

having the capability of controlling the execution timing (interpreted as replica updating timing) of the manipulation request (the controller define a timing of update execution for the replica. Therefore, the timing of the replica updating can be determined, see, e.g., col. 3, lines 10-15).

The applicant's second mode in the claim 1 is interpreted as the executing a manipulation for the shared data in accordance with the timely received response information from the received computer or the server processor.

Negishi teaches all the limitations of first mode as presented below. The second mode is just adding the well-known timeout method as another mode to select in order to properly react on the timely received response information.

Negishi does not teach of using timeout method in order to execute a manipulation based on a response message timing from the server.

Birkler teaches as follows:

a request/response protocol implementation between a client and a server for updating presence information (see, e.g., page 2, paragraph [0020], lines 1-4 and figure 4); and

implementing timeout method in order to response back to the requested party (once expiration of the timeout period is detected, an update response is sent back to

the client from the server, see, e.g., page 2, paragraph [0023], lines 13-17 and figure 10).

Therefore, Birkler teaches the well-know timeout method used between a client and a server.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Negishi to include a timeout method as taught by Birkler in order to provide a selective mode in two ways communications by implementing the timeout method for modifying the shared data of the client.

The applicant's first mode in the claim 1 is interpreted as the executing a manipulation for the shared data in accordance with the manipulation request.

Negishi teaches a maintaining consistency of replica content by interchanging data modification with another computer and the replica is in accordance with the received modification request from the application (see, e.g., col. 2, lines 26-42).

The applicant's third mode in the claim 1 is interpreted as the executing a manipulation for the shared data in accordance with the response information from the received computer or the server processor.

Negishi teaches updating the response confirmation values (equivalent to applicant's executing a manipulation) in the transmission queue of the sending computer by comparing the received response value (equivalent to applicant's response information) from the received computer (transmit a packet which includes the values of response BT and SBT in the reception queue and the values of the response BT and SBT are used to change the values of the response confirmation BT and SBT that are

Art Unit: 2154

stored in the transmission queue of the computer B, see, e.g., col. 6, lines 24-34, therefore the values of the response confirmation is updated by using the value of the response, see, e.g., col. 6, lines 34-49).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEONG S. PARK whose telephone number is (571)270-1597. The examiner can normally be reached on Monday through Friday 7:00 - 3:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. P./

Examiner, Art Unit 2154

June 5, 2008

Application/Control Number: 10/534,750
Art Unit: 2154

Page 12

/Joseph E. Avellino/
Primary Examiner, Art Unit 2146